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## Abstract

The present invention relates to a cellular communication system for wireless telecommunication on the basis of an OFDM scheme, comprising a plurality of base stations B, whereby at least one base station B is allocated to each cell C of the communication system and whereby information communicated from said base stations comprises data parts and pilot parts. The present invention further relates to a method for operating such a cellular communication system. The present invention is characterised in that the frequency reuse factor of the data parts is different from a frequency reuse factor of the pilot parts. Hereby, an optimisation between high capacity and reliable and correct channel estimation on the basis of the pilot parts can be achieved.

(Fig. 1, Fig. 2)